

REMARKS

Claims 23-40 are pending in the application. Reconsideration of the present application in light of the amendment to the claims and the following remarks is respectfully requested.

Claims 23-40 stand rejected as being indefinite. Applicants have amended claims 24-31 herein to change "the additive" to read --the chewing gum ingredient--. Applicants have amended claim 32 to delete the phrase "said ingredient being incorporated internally into said gum". Applicants submit that these amendments overcome the Examiner's basis for the rejections.

In view of the above, Applicants respectfully submit that the rejection of claims 23-40 under 35 USC Section 112, second paragraph should be withdrawn.

Claims 23-31 stand rejected under 35 USC 103(a) as being unpatentable over Cherukuri et al. (U.S. Patent No. 4,961,935) or Yatka et al. (WO 95/08926). The Office Action states that the palatinit in Cherukuri et al. is incorporated internally as part of the chewing gum ingredient composition, which composition may or may not be coated. The isomalt in Yatka et al. may be in powder form, i.e., granules, and is part of the internal gum composition. Reconsideration and withdrawal of the rejection is respectfully requested.

*the sweet  
text*

*Chew Sweet  
Coat Coated  
Core  
Crunch*

There is no teaching nor suggestion in Cherukuri et al. (U.S. Patent No. 4,961,935) of a chewing gum ingredient which is isomalt, which is granulated, which has a particle size greater than 50 mesh, and which has the property of providing crunch to a chewing gum. Cherukuri et al. teach chewing gum cores which are formulated with isomalt as the bulk sweetener. The isomalt is used to provide firmer texture and reduced moisture absorption properties to the gum core, properties which enable the gum core to be easily coated and thereby to provide a better coating, one wherein the coating has better crunch and crispness as compared with the crunch and crispness of a coated gum which does not contain isomalt in the core and is not as easily coated.

The question here appears to turn on whether or not Cherukuri et al. (U.S. Patent No. 4,961,935) teach that the inventive gum cores themselves, absent the confectionery coating, have crunch when chewed. The Examiner apparently holds that Cherukuri et al. teach that the inventive gum cores have a crunch when chewed which is due to the presence of the isomalt. Applicants indicated in a prior response that Cherukuri et al. teach that isomalt is used in gum cores to provide a firmer texture to the core which allows for easier coating and a crispier coating. The "crunch" or "crispness" of the coating was tested by Cherukuri et al. In the present action, the Examiner proposes that "Applicants' position that Cherukuri et al. (column 13, lines 50-57 and Table 2) refers to crunch provided by a coating is ill founded and without merit" in that the Examiner holds that "Cherukuri et al. (column 12, lines 8-22) clearly discloses that the palatinit bulking agent is part of an internal chewing gum 'composition'. Table 2 (Examples 6 and 7) shows that chewing gum

compositions which include palatinit as the bulking agent are crunchier than chewing gum compositions which include sorbitol or mannitol as the bulking agent. These chewing gum compositions my then be coated (column 13, lines 58-60)". Applicants again submit that a reading of the Cherukuri et al. reference shows the following facts which clearly rebut the Examiner's position.

Examples 1-4 at columns 11 and 12 demonstrate conventional chewing gum compositions. The degree of harness is measured, and the firmness of the chewing gum, as determined by the hardness tests, is compared and reported. Examples 5-7 at columns 12 and 13, demonstrate substantially anhydrous uncoated chewing gum centers. The degree of hardness is measured and again the firmness of the cores, absent coating, based on that result is reported as in Table 1 at column 13. The cores of these same examples are then coated with a hard candy coating described as conventional. A hardness test is not conducted on these coating gums. These coated gums are tested for crunch. For this test an expert art panel is used to evaluate the crunch of the coated gums upon chewing. Table 2 at column 13 and the text at column 13 reports the crunch of the palatinit containing coated gums as favorable compared to the comparative coated cores. In the succeeding paragraph, Cherukuri et al. summarize that the gums of the invention are all firmer and easier to coat and that, although the coated gums are firmer in texture, they have an acceptable soft chew.

The sole disclosure of the property of "crunch" is, as Applicants assert, found in the teaching of a coated gum core as shown in Table 2, coated gum cores

Examples 5-7. It was an object of the Cherukuri et al. invention to provide a firm (and more moisture stable) gum core which itself provides a better coating. There is no teaching that crunch is a part of the properties possessed by either the isomalt containing core, nor the comparative gum core, nor has the crunch of the cores been tested.

Subsequent to the above-quoted statements by the Examiner, the Examiner further holds that the term "crunch" is a relative term without clear meaning in this art, but, nonetheless, is provided by the palatinit in Cherukuri et al. Similarly since the powdered isomalt in Yatka et al. is composed of granules, which are part of the internal chewing gum composition therein, some "crunch" a relative term, is inherently provided thereby. It would appear from the Examiner's statements that one skilled in the art does not know what properties are possessed by a material described by the term "crunch" or even powder.

The statement that "crunch is a relative term without clear meaning in the art" is without foundation. It is clear that Cherukuri et al. had a clear understanding of the meaning of the term as did the expert art panel who applied an art recognized test to evaluate the property. Although the degree of crunch may vary, whether or not a comestible possesses crunch is clearly understood by the expert in the art.

This statement by the Examiner in fact rebuts the Examiner's own position in support of *prima facie* obviousness. If one skilled in the art can not tell exactly what is conveyed by a reference teaching, if there is doubt as to what properties are

possessed by the gum cores taught therein, if there is doubt as to what properties are possessed by the gum cores taught therein, and what properties are provided by the isomalt used therein or what properties are possessed by the isomalt used therein, then it cannot be obvious as to what properties are possessed by any isomalt product.

*isomalt is  
natural  
product of  
granulation*

The Examiner has also cited Yatka et al. (WO 95/08926). Applicants claim a granulated additive having a particle size greater than 50 mesh. The Examiner apparently cites Yatka et al. herein as providing this feature of the claimed invention. Applicants respectfully submit that this statement is purely speculative. There is no showing that the powdered crystalline isomalt used by Yatka et al. is in the form of, or contains, granules, Yatka et al. do not teach that the isomalt used therein is, or has, any granulated particles. A powder is not a granulate. Being in crystalline form does not render a powder a granulated product. Nowhere does Yatka et al. teach that powder encompass any physical state other than what is attributable to its common meaning.

The Examiner lastly holds that "the word crunch is not a positive limitation of Applicant's product claims". Applicants do not see the point of this statement. The claimed ingredient is a crunch providing ingredient. The art must show or suggest a crunch providing ingredient which consists essentially of isomalt, which is granulated and which has a particle size of greater than 50 mesh.

None of the cited primary references suggest a crystalline granulate isomalt having a particle size of greater than 50 mesh be used as a chewing gum ingredient to provide internal crunch to a gum. When isomalt is used internally as a bulking agent in a chewing gum, it is used in the form in which it is generally available, namely as a crystalline powder not as a granulate. There is no teaching, nor suggestion in any reference, to the contrary.

In view of the above, Applicants respectfully submit that the rejection of claims 23-31 under 35 USC Section 103(a) should be withdrawn.

Claims 32-40 stand rejected under 35 USC Section 103(a) as being unpatentable over Cherukuri et al. (U.S. Patent No. 4,961,935) or Yatka et al. (WO 95/08926) as above and further in view of Tanaka et al. (U.S. Patent No. 5,709,895). The Examiner states that "Although Tanaka et al. performs process steps not claimed by Applicant, as Applicant argues, Applicants' claims are open ended and do not preclude such additional process steps". Applicants have amended claim 32 herein to limit the claimed process to consist essentially of the three, recited limiting steps. Reconsideration and withdrawal of the rejection is thereby deemed proper and is respectfully requested.

Applicants teach and claim a process for the preparation of a granulated isomalt chewing gum ingredient for providing crunch internally to a chewing gum, wherein that process, as amended, consists essentially of the novel sequence of steps of heating isomalt at a temperature of 130°C or higher; cooling the isomalt to

form a solid; and granulating the solid to a particle size greater than 50 mesh to provide the right texture modifying crunch additive.

Cherukuri et al. (U.S. Patent No. 4,961,935) and Yatka et al. (WO 95/08926) have been cited by the Examiner as primary references. Cherukuri et al. is detailed above. Cherukuri et al. do not teach any modification of the isomalt powder used therein. Yatka et al. is the only teaching which concerns modification of isomalt powder. Yatka et al. were chiefly concerned with encapsulating, agglomerating or absorbing the isomalt with another material to provide a controlled release product. Standard techniques were used to prepare the materials. In all cases the encapsulated material was ground to a powdered, coated sweetener or the powder was used to first form a syrup. Neither of these references suggest the claimed method.

The secondary reference, Tanaka et al., teaches a process for encapsulating a flavor which uses an encapsulating matrix composed of both a hydrogenated saccharide and a modified starch. This method by Tanaka et al. does not suggest the method taught and claimed by the Applicants. Tanaka et al. blend materials to produce an encapsulate in a method that requires heating of the carbohydrate mix, a mixing stage for blending in a flavor, and a subsequent extrusion stage. <sup>Codigos has an application</sup> Applicants claimed process does not have these required limitations. Applications neither blend nor mix ingredients, nor heat and extrude. Applicants heat isomalt, neat or in a solution, to a temperature of 130°C or higher to remove moisture and/or melt the isomalt, cool the crystalline melt to form a solid isomalt without further processing

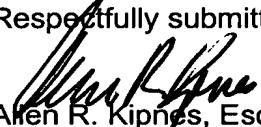
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and granulated the solid to provide the crunch additive of a sizes of greater than 50 mesh.

Tanaka et al. do not teach or suggest Applicants' claimed invention as amended herein. In view of the above, Applicants respectfully submit that the rejection of claims 32-40 under 35 USC Section 103(a) should be withdrawn.

It is believed that no fee is due in connection with this amendment. However, if any fee is due, it should be charged to Deposit Account No. 23-0510.

Respectfully submitted,

  
Allen R. Kipnes, Esquire  
Registration No. 28,433  
Attorney for Applicant

Address All Correspondence to:

Allen R. Kipnes, Esquire  
WATOV & KIPNES, P.C.  
P.O. Box 247  
Princeton Junction, NJ 08550  
(609) 243-0330